

Disasters
Bring Out
the Best in
All of Us

San Diego County's '07 Wildfires

Story By
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FIRST REPORTS

from the field were ominous: High winds made it unlikely the fires would be stopped, and already patients were on their way to the burn center. At the end of the first week of the 2007 wildfires, the medical response system and physicians could be proud. The cooperative work between the county, the Hospital Association, and the San Diego County Medical Society (SDCMS) truly paid off.

County EMS activated its Medical Operations Center (MOC) on Sunday afternoon, October 21, 2007. The MOC was developed in response to suggestions after the 2003 fires and serves as a coordinating center for the county's medical response. It is staffed not only by county EMS staff, but by community partners as well, including hospital nurses, ambulance coordinators, a representative of the community clinics, and others. Communication ties exist to SDCMS and the Hospital Association, through which organizations can access We-EOC, the county's emergency management information system.

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n the early morning hours of October 22, the fires burned toward Poway neighborhoods with acute care hospitals and nursing homes. County EMS used its Geographic Information Systems (GIS) mapping capability to overlay the location of hospitals and nursing homes on a map of the county with fire perimeters.

We made sure facilities activated their Emergency Operations Centers (EOCs) and reviewed their emergency and evacuation plans. We obtained facility census and types of patients to pre-plan possible facility evacuations. MOC nurses found patients appropriate beds in other hospitals and worked with the ambulance coordinator and hospital staff to determine transport needs in terms of ambulances, buses, and other vehicles. The pre-plan was finished in the early morning hours in conjunction with Pomerado Hospital.

The Pomerado medical staff came to the hospital in the early morning to evaluate patients for transfer or discharge home, and to help prepare patients for movement. These physicians, along with other hospital personnel, left their families and homes despite the threat, with some, in fact, being evacuated themselves. A number lost their homes. Despite that, they worked hard to ensure their patients' safety and comfort.

When Pomerado Hospital and surrounding skilled nursing facilities (SNFs) were evacuated in the morning, the evacuations went smoothly despite the time pressure. The hospital evacuation finished in less than two hours, with the SNFs following. The acute care patients were distributed among 12 different hospitals. Ten were ICU patients, and one was transferred on a ventilator. A number of the SNF patients were chronic ventilator patients. By the end of the evacuation phase of the wildfires, 2,158 patients had been moved from medical or assisted living facilities.

EMS polled the system for bed capacity and other re-

sources, streamlining to preserve resources and monitoring needs on an ongoing basis. Eventually, UCSD would admit 19 burn patients, eight of whom required mechanical ventilation. Others were treated as outpatients.

That first day the MOC fell into a rhythm, evaluating the fires' progress and evacuating in front of the moving fire line. Eventually, two acute care hospitals, Fallbrook and Pomerado, a psychiatric facility, and 12 nursing facilities would be evacuated. Fallbrook sent its patients to Tri-City, moving through Camp Pendleton.

When time allowed, transferred patients were sent directly to a bed in a similar facility. But when large numbers were evacuated at one time, they were moved to temporary evacuation points until they could be redistributed to the facility.

Sharp opened a wing of Sharp Cabrillo to nursing home evacuees, and the Naval Hospital Balboa also opened a ward. The county took patients at Edgemoor. Some patients were sent as far as Orange and Imperial counties.

Several evacuations, such as the evacuation of Mount Miguel Covenant in Spring Valley, occurred under distinct time pressure. Here, hundreds of patients were moved rapidly in the early morning hours of Tuesday as the fire came down Mount Miguel and curled around Sweetwater

reservoir toward the facility. San Diego High School was opened instantly as a shelter and temporary evacuation point. The evacuation was beautifully done, including the discovery of one fearful resident hiding in a room. Many of the evacuated facilities showed great organization, taking medications, records, and mattresses for residents.

Shelters eventually housed 26,000 evacuees. The EMS focus was on SNF evacuees and the fragile elderly. Public Health placed a public health nurse in each shelter to monitor health needs and provide basic first aid. The public health nurses were frequently the first ones on scene and faced major challenges getting the medical component and monitoring up and running. Infectious disease was not a problem in the shelters for this brief





period, but Disease Control followed up on two mini-clusters of illness.

Physicians provided great leadership and clinical care in shelters during the emergency. Jim Dunford, MD, Colleen Buono, MD, Bill Sperling, MD, and Roneet Lev, MD (chair of the SDCMS Emergency Medicine Oversight Committee) responded at Qualcomm and proceeded to provide wonderful organization and clinical care over the next four days, assisted by numerous other physicians, nurses, pharmacists, paramedics, and other healthcare professionals.

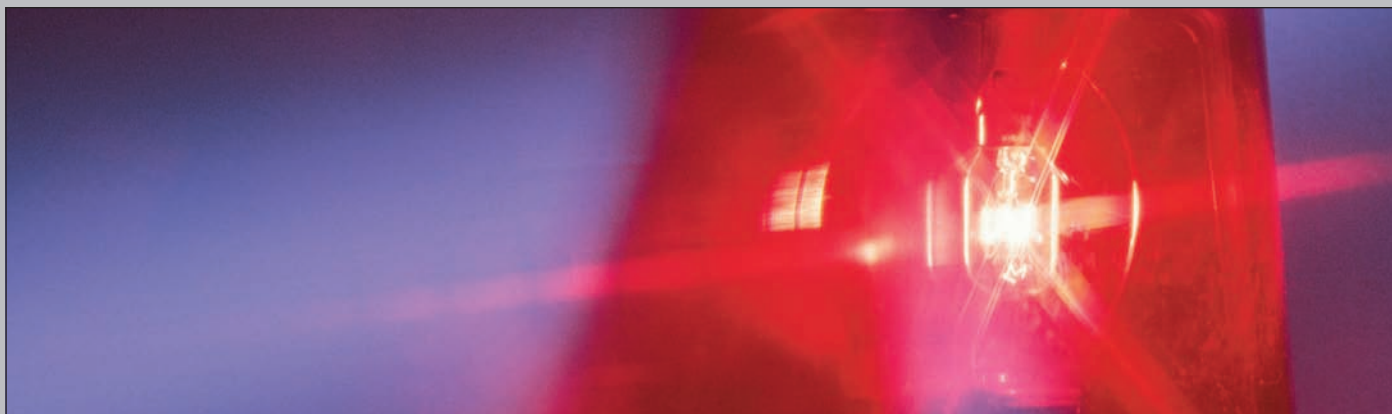
Likewise at the Del Mar shelter, local physician members of the Del Mar CERT team responded, followed by volunteers from our County Medical Reserve Corps. In Del Mar, facility staff from Villa Rancho Bernardo cared for their patients at the shelter, getting them up after a night on mattresses in the shelter, and providing dressing changes, ambulation, and other care. In most cases, patients from skilled nursing facilities were cared for in shelters by staff from their own facilities.

At San Diego High School, volunteers surged into the shelter set up suddenly with no warning in the middle of

the night. Chris Searles, MD, from UCSD, enlisted the help of Paul Miller, MD, Chris Morache, MD, and Dave Folsom, MD, to provide care at the San Diego High shelter. Order was quickly brought to the initial confusion following the rapid evacuations.

By the end of Monday, 300,000 people evacuated their homes, a number that grew to an estimated 500,000 by the end of Tuesday. Medical personnel were dispatched to evaluate shelters or to request assistance. Medical Reserve Corps (MRC) volunteers played an invaluable role. More than 70 MRC volunteers worked in shelters in 15 different locations. They agreed to staff a new shelter in Balboa Park that proved unnecessary. Others came into the MOC and helped process and organize volunteers. The Navy provided volunteers, including a pediatrician to evaluate ill children in a shelter in Oceanside.

SDCMS Executive Director Tom Gehring got volunteer efforts underway immediately, confirming credentials and streamlining the volunteer process so they could enter into the county effort. Tom worked constantly through the response to assure physician involvement and participation.



Another important component was the Pharmacy Emergency Response Team, headed by S. John Johnson, PharmD, from Sharp Hospital. Volunteer pharmacists, pharmacy technicians, and pharmacy students from UCSD helped evaluate patients' medication histories and needs, and organized donated supplies. They worked at Qualcomm, Del Mar, and other shelters around the county. This is an important response component, critical with the rapid evacuation of fragile elderly and nursing home patients.

EMAN, the Emergency Medical Alert Network, is the Health and Human Services Agency emergency communications system that delivers messages via email, telephone, pager, or other devices. Many physicians and others in the community subscribe and receive both routine and urgent surveillance, disease, and emergency information via electronic communications. The EMAN network was used to provide situation reports to subscribers through the firestorm emergency. Physicians interested in subscribing to EMAN can request an application at www.emansandiego.com.

The state and federal governments contributed mutual aid. The California CAL/MAT team was activated for the first time and set up at Del Mar to provide medical care, and later performed assessments of shelters. They were followed by two federal Disaster Medical Assistance Teams (DMATs) from New Mexico and the Seattle area. The DMATs also provided care at the Del Mar shelter, assessments of rural areas, and care at the Local Assistance Centers.

The Scripps system provided a mobile clinic to the Rancho Bernardo Local Assistance Center, and showed how valuable this freestanding clinic could be. The Sharp system donated critical pharmaceuticals to Qualcomm both

in the early hours before donations poured in, and later.

By the end of the week, as areas became safe for reentry, state Licensing and Certification inspected hospitals and nursing facilities for safety and to approve re-occupancy. EMS worked closely with Licensing during the entire response. Once facilities were approved for reentry, we reversed the flow, and patients were transported back to their home facilities.

Much the focus near the end of the response was dealing with continuing care in rural areas. Water issues were also important. Wilma Wooten, MD, our new public health officer, was impressive during the entire response, dealing with the initial emergency and moving on to important issues of air quality and safe water.

San Diego County, and especially the medical community, should be proud of the response. The assessments, evacuations, medical care, and other medical needs were superb. The community rose up and volunteered in an unprecedented way, caring for those displaced, or ill, especially the most fragile and needy.

It's unfortunate we cannot name all those who helped in this article.

Debriefing and reconstructing the response started as the emergency response wound down and continues. We are identifying areas in which we excelled, and those things that need changes or improvement. If you have suggestions contact me at San Diego County Emergency Medical Services. 📧

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